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1a-g

1a:  $R = (CH_2CH_2O)_5 - CH_2CH_2$ 

1b:  $R = (CH_2)_3$ 

1c:  $R = (CH_2CH_2O)_2 - CH_2CH_2$ 

1d:  $R = CH_2CH(CH_2OH)$ 

1e:  $R = (CH_2)_4$ 

1f: R = 1',2'-dideoxyribose

lg:  $R = (CH_2)_6$ 

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FIGURE 2

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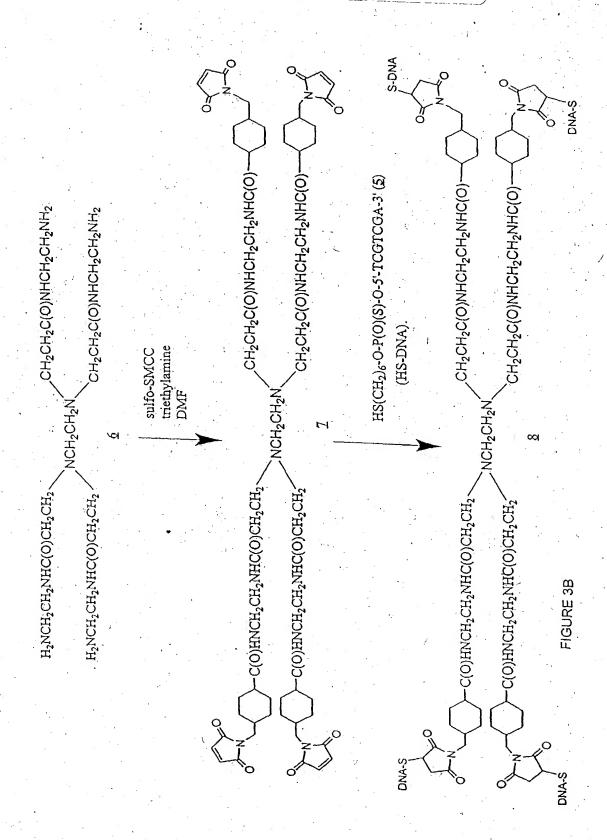
HS-(CH2)6-0-P-(O)(S)-O-5'-TCGTCGA-3'

HO-(CH2)6-S;S-(CH2)6-O-P-(O)(S)-O-5'-TCGTCGA-3'

FIGURE 3A

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**TMEA** 

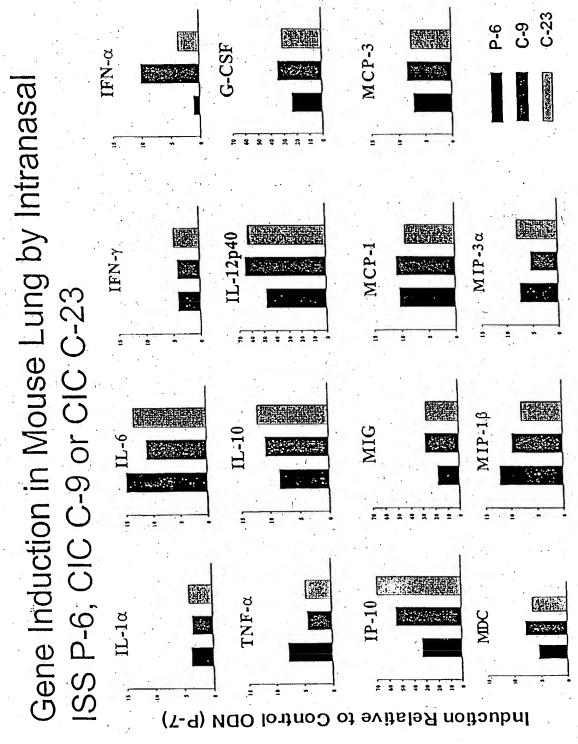
5'-TCGTCGA-3'-HEG-5'-ACGTTCG-3'-HEG-5'-AGATGAT-3'-P(O)(S)-O(C H<sub>2</sub>)<sub>3</sub>-SH (C-117) DNA-SH

C-105

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-Mouse In vivo Cytokines ALL ISS/CIC doses 20 µg 8000-0009 4000 (lm/gq) 04/q 21-11

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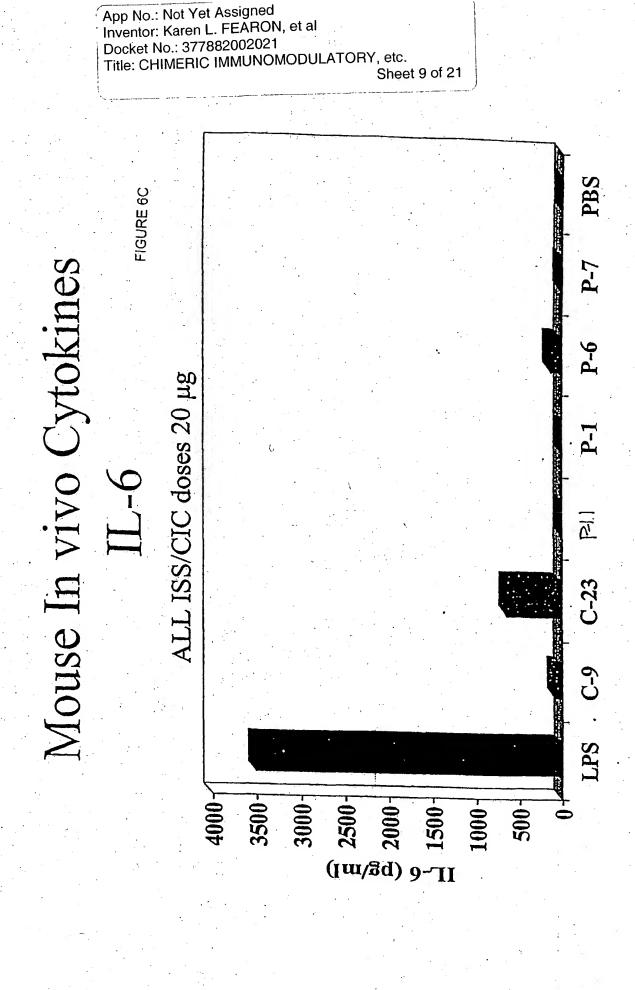
Sheet 8 of 21 FIGURE 6B P-7 Mouse In vivo Cytokines ALL ISS/CIC doses 20 µg P-1 -009 800 400 TNFa (pg/ml)

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Figure 7A

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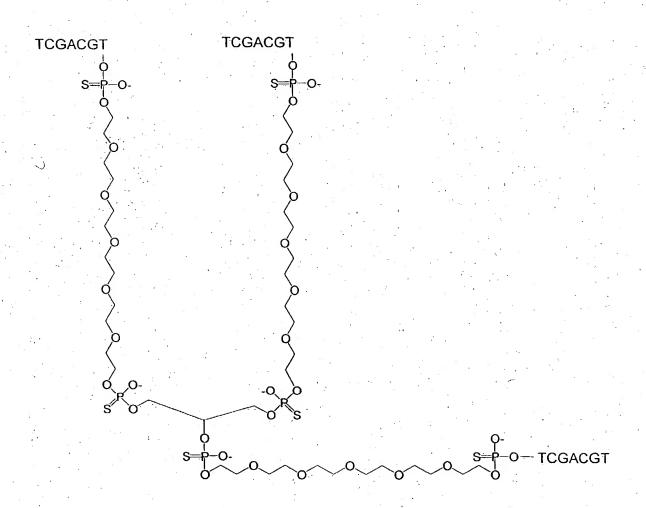


Figure 7B

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### Figure 8A

#### Figure 8B

5'-TCGTCGA-3'-HEG

glycerol-HEG-5'-TCGTCGA-3'

5'-TCGACGT-3'-HEG

## Figure 8C

C-171

S'-TCGACGT-3'-HEG

Glycerol-5'-TTTTT-3'-glycerol

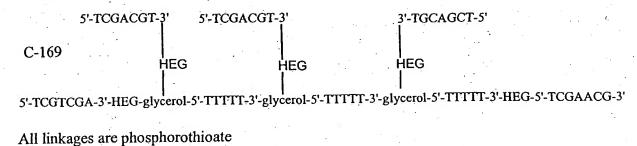
5'-TCGACGT-3'-HEG

HEG-3'-TGCAGCT-5'

HEG-3'-TGCAGCT-5'

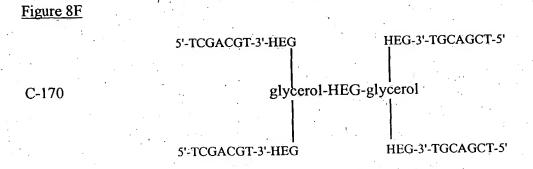
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#### Figure 8D



# Figure 8E

All linkages are phosphorothioate



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#### Figure 8G

total MW approx. 10,000 Da

PEG = polyethylene glycol

5'-TEGACGT-3'-HEG-C3-SH

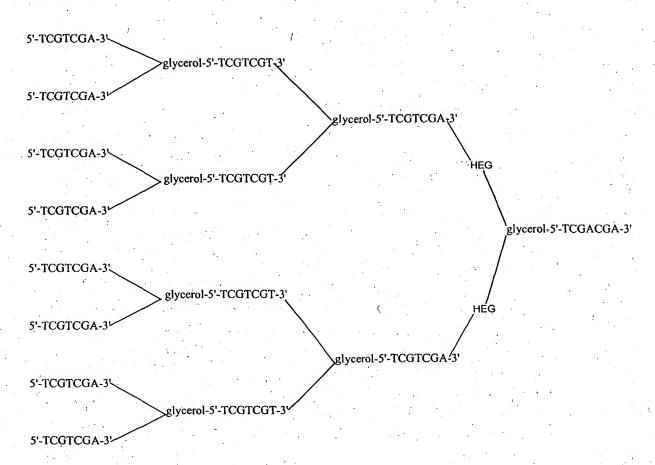
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TCG [T], CGC-H-[A], CGCCG HEG-3'-TGCAGCT-5' HEG-3'-TGCAGCT-5' TII GCGGC-H-AGC [A] GCGCT 3'-AACCGGTTCGAACCGGTT-5'-HEG-glycerd TCG[T]; CGC-H-[A] & CGCCG glycerol-HEG-5'-TTGGCCAAGCTTGGCCAA-3' AGC [A] GCGCT C-167 after annealing in the presence of salt [T] GCGGC -H-TCG[T] CGC HE [A] CGCCG = S'-TCGACGT-3'-HEG S-TCGACGT-3'-HEG

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Linkages are all phosphorothioate

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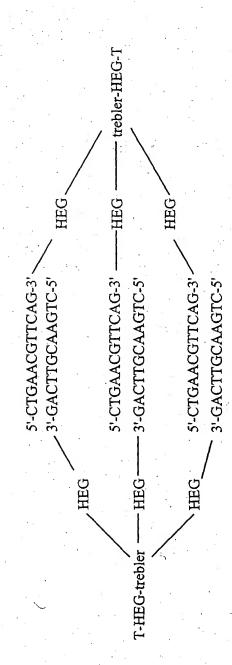


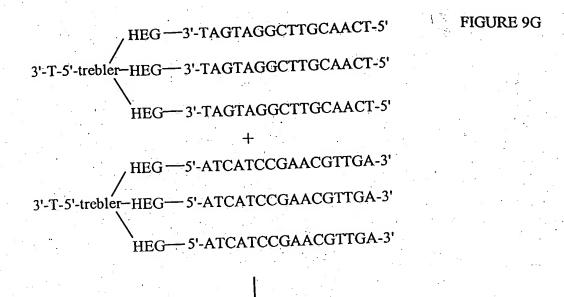
Figure 9F

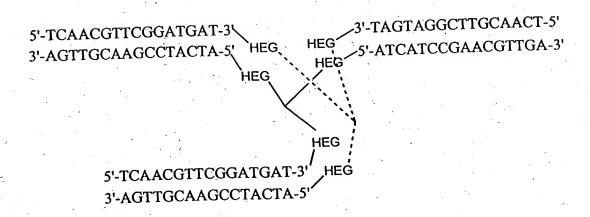
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Junction of long bonds represents the trebler-5'-T-3'

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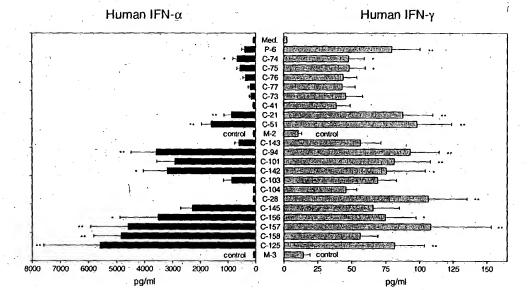


FIGURE 10

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# Human B cell proliferation

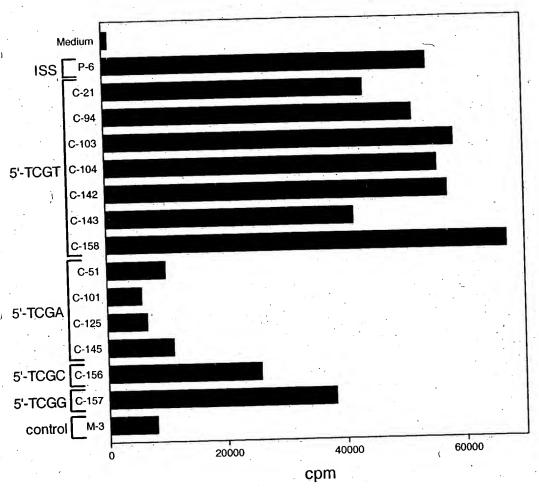


FIGURE 11